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Snow Cruising



FOREWORD

THIS IS SNOW CRUISING . . .

A new dimension in family winter fun, invented by the snow cruiser, the snow-time sports car that makes all things possible for those who enjoy their winters out-of-doors.

Take your pick . . . from ski-joring to slalom . . . from trapping to toboggan . . . there's a sport for every mood, for every member of the family a go go on snow.

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FAMILY SNOW CRUISING FUN



How About Ski-Joring?

A pair of snow skis, OR water skis with the bindings adjusted to fit boots, a 35-foot length of strong nylon tow-rope, and a snowmobile puts you in business. One person drives, with preferably a passenger facing the rear as an observer, and the ski-jorer is towed like a water skier on the end of the line. Use the same "tow bar" arrangement used in water skiing so the skier can "cast off" when he wishes.

When stopping, with the ski-jorer still holding on, the word is "easy". The snowpilot should reduce speed slowly, so the skier can keep control.

A variation of ski-joring is to make up a "train", with the snowmobile as the engine and a two, or three-man toboggan as the passenger car. A longer towline is best here, because unlike a skier, the toboggan can't check its speed.



MORE WINTER FUN

A snowmobile puts range into winter hunting and trapping. With one, the winter woodsman can penetrate his territory further than ever before with snowshoes or dogsled. It's much easier, too, bringing back the game on a snowmobile, instead of packing it out, Indian-fashion.

On winter hunting safaris when game will inevitably lure the hunter further in than he'd ordinarily travel, it's best to go in pairs of snowmobiles. Long-range brush-cruising is pleasant and challenging, but a "buddy system" can help you avoid the inconvenience of getting lost,



or having a lonely mechanical breakdown out in the boondocks.

One thing more. Remember that your snowmobile is great for getting there but, like an automobile, you can't shoot from it. It's the law.

HUNTING AND TRAPPING



Winter takes on more appeal than ever with a snowmobile. Now, snow-choked access to family summer cabins is no longer an obstacle to year-round enjoyment of a sizable investment. More families today have winterized their summer vacation homes, because with a snowmobile, they can get there no matter how bad conditions may be.

Ice fishermen are great snowmobile enthusiasts. Using a snowmobile as the means to get to a choice spot on a river or frozen lake eliminates the danger of traveling on ice that won't support a car's weight. Leave the car and snowmobile trailer parked on shore, and snowmobile to the happy fishing grounds!

The girls probably have a pet recipe or two they've been saving for hearty winter picnics. Turn the tables on your summer ice chest - because it'll keep hot foods HOT as well as cold foods COLD. Get the gang together for a winter version of outdoor fun - without the ants. Plenty of warm, refreshing liquids, a hot dog

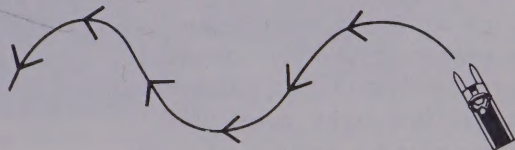
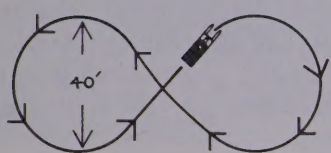
roast, and good, stick-to-the-ribs dishes will bring snowmobiling friends and families a new idea in picnicking that's sure to repeat. Rest assured your favorite picnic grounds will have a charm you've never seen before. The beauty of winter outdoors has no comparison.

The sun never sets on Boy Scout fun . . . and winter doesn't either. A responsible child can handle a snowmobile with proper supervision, so a Boy Scout winter trek on snowmobiles

should be a worthwhile project for Scout leaders. Cooperation from local snowmobile clubs can be solicited for enough machines to carry the lads out to winter camp grounds or over trails which ordinarily would wait until spring for visitors.

The Boy Scouts, YMCA groups, boys' clubs and other organized groups are excellent candidates for supervised snowmobile treks. The only problem: Try to get a boy OFF a snowmobile once he's been ON one!

TURNING



The most important maneuver in snowmobiling is the turn. Turning a snowmobile is a lot like turning a bicycle or motorcycle. The more you lean into a turn with your body and that of your passenger, too, the sharper you'll be able to bring the machine around. Remember in turning, that you've got to keep enough power on to keep the machine moving. Too little throttle, and you'll stall your turn.

Try a few "lazy 8's", as airplane pilots call them. These are two linked 360-degree turns of about 40-foot diameter. Go slowly at first, then build up speed in repeated runs until you start to feel the machine "slip" sideways. You'll find that even when it "slips", or

"breaks loose", you can control it either by easing off OR increasing the throttle opening. A little experimentation will reveal just how much power you need for the snow conditions.

Now, try some "wiggles", or "jogs"; a series of left and right turns along a straight course, just like a slalom skier. You'll find that turning will be easier in one direction than the other. That's the way we're built. When you find your weak side, practise on it a little more than the other.

Once you've mastered turning and handling the throttle, the rest is easy. And you can begin teaching other members of the family what you've learned.

GENERAL RIDING TIPS

Most snowmobiles are made to carry two people - the snowpilot and one passenger, along with a small amount of duffel. You'll find the heavier you load a snowmobile, the less performance you'll get from it. Just makes sense, doesn't it?

When you're cruising in the woods, watch out for tree branches, snow-covered logs or hidden, snow-filled depressions which could upset your machine. Of these, tree branches are the most likely to be encountered. Dips or holes have a way of becoming nearly invisible during the late afternoon when the light goes "flat", demanding a degree of commonsense driving. Goggles, with replaceable lenses for both flat (amber) and glare (smoke color) light conditions, are useful.



The basic riding position—sitting

Drive ahead of yourself. No need to file a flight plan, or anything like that, but just make it a rule to plan ahead - even if it's only 500 feet ahead! When you drive up a hill, remember you've got to come down it, too.



Try the kneeling position for easier steering

If the hill's very steep, you should have a good plan for how to come down. If a hill is extremely steep, a good plan is to "traverse" down (or up) by making shallow "sweeps" across the face of the slope, progressing up or down about 30 feet with each sweep.

Test snow conditions before taking off on any ride. What was true of the snow yesterday isn't always true today, and an overnight freeze or snowfall can bring some surprises in the way you'll drive your machine. Try a few turns and stops. You'll get a better feeling of the trail, and you'll have more fun.



For narrow paths the standing position

HOW TO USE A SNOWMOBILE

Snowmobiles are in their element OFF the road where they're the most fun. Best snowmobiling is over six to 12 inches of snow, or what might be called a medium snowfall. The surface of a snow-covered frozen lake is an ideal practice area. Extremely hard-packed snow, or glare ice makes for tricky handling.

As with any form of sport, practice makes perfect. Study the Owner's Manual for your machine, then head for the wide open spaces. A field, a snow-covered frozen lake or whatever tree-free space you can find, and practise!

BE ALERT FOR UNSAFE ICE CONDITIONS!

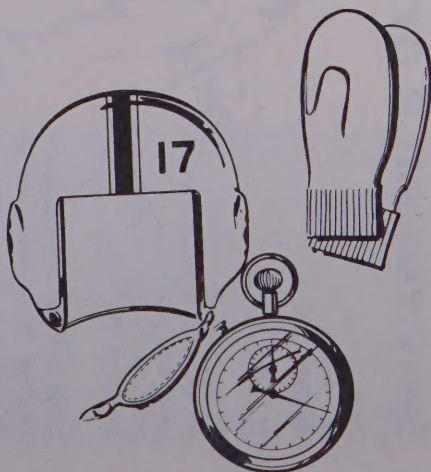


GYMKHANA

As skill is gained, the snowcruiser pilot will look for new fields to conquer. This usually means competitive events, from single vehicle contests against a stop-watch to a variety of competitions involving a number of machines. Such a competitive meet is known as a Gymkhana, and a variety of typical events is outlined in the following pages.

Equipment needed is simple and easily obtained. About two dozen wood or bamboo poles with flags or pennants at the top are used for course markers. Or, you may choose the familiar rubber pylons normally used for marking auto traffic lanes, etc. A good stop-watch, reading in tenths of

a second, is essential. Specialized events listed here will require additional equipment, shown below their titles. For the most part, a Gymkhana is held on a frozen, snow-covered lake or tree-less field.

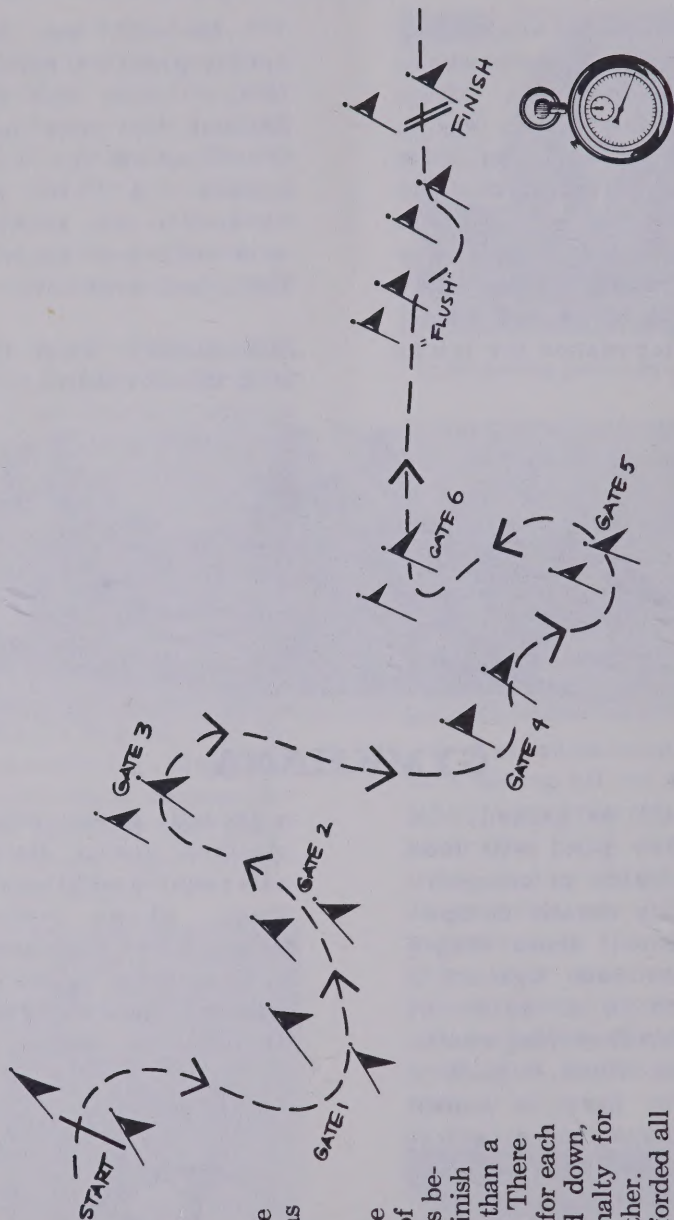


SNOWMOBILE GYMKHANA

Event 1.

SLALOM

(Equipment needed:
Stopwatch and operator;
start and finish-line
officials; course markers
as noted above.)



This is a one-vehicle race against the clock, just as in skiing, with a course laid out according to the diagram. Gates are set to provide a series of right and left-hand turns between the Start and Finish lines which are no less than a quarter of a mile apart. There is a one-second penalty for each course marker knocked down, and a two-second penalty for missing a "gate" altogether.

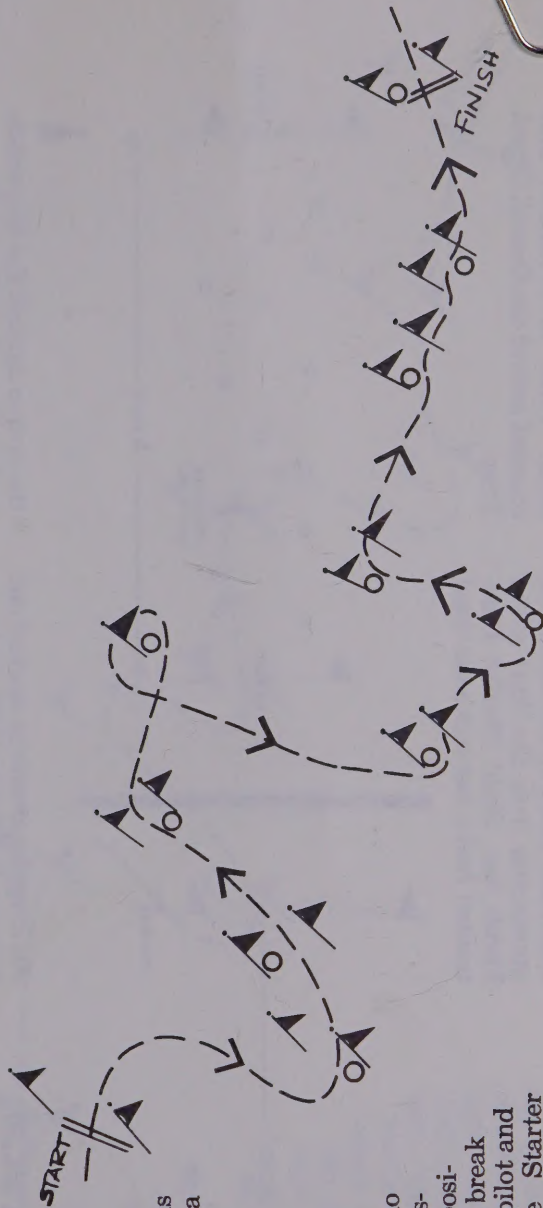
Practice should be afforded all contestants before the event gets under way. If time permits, each contestant should be allowed *two* heats or tries, with his lowest elapsed time being official.

Event 2.

"BENGAL LANCERS"

(Equipment needed:

Several four-foot poles sharpened at one end, or with a nail embedded to form a point; a quantity of bright-colored rubber balloons; course markers used in Slalom event.)



Using the same course as the "Slalom" event, or a similar layout, a balloon is tied to the base of a course marker pole at each gate.

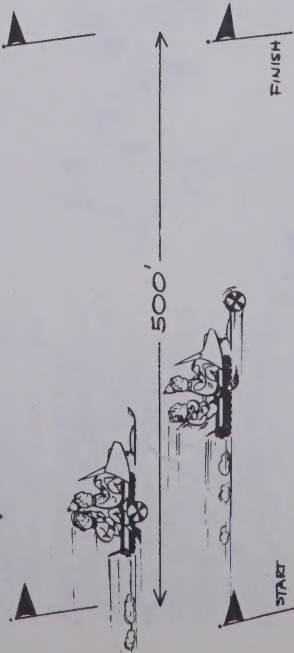
Alternate the position of the balloon from gate to gate so the lancer, who is the snowpilot's passenger, must shift his position in order to stab and break the balloon. With snowpilot and passenger aboard, the Starter gives the signal, and the timer clocks the team as it sets off along the course, racing against the clock AND breaking every balloon. One second is added for each balloon missed.

Event 3.

"BROOM-BALL RACE"

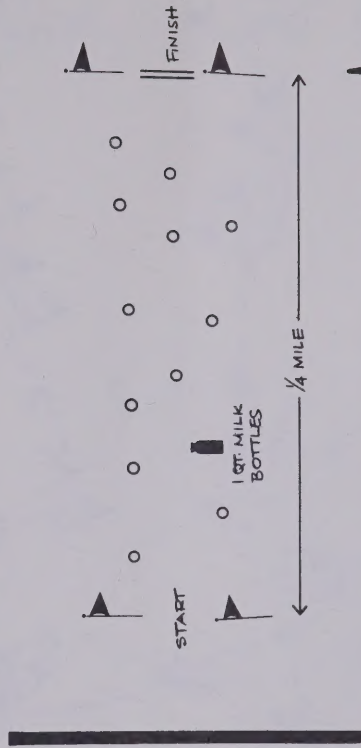
(Equipment needed:

Two ordinary household brooms; Two large-size beach balls; four course-marker poles for start and finish line; Starter and Timer.)



A sort of one-way snow-polo game, with snowpilot and passenger on each of two snowmobiles. Passenger holds the broom with which he (or she) has to guide a beach ball along at the side of the snowmobile from the Start to the Finish line. Skill! Thrills! Frustration! And a lost ball costs time!

At the signal, both teams set out for the finish line, running against the clock, with passengers keeping the balls in control. First team to cross the finish line with its ball wins. Time is recorded and counted toward the Overall Grand Prize.



Event 4.

"HIT THE BOTTLE"

(Equipment needed:

Twelve glass milk bottles; about two dozen small stones, sized to pass through the neck of a milk bottle; start and finish-line markers; Starter and Timer.)

An *irregular* course is marked out between the Start and Finish lines, not to exceed a quarter-mile in length. Markers are the milk bottles, into which the passenger must drop a stone as his snowmobile passes.

One snowmobile at a time runs

the course against the stopwatch, and at the completion of the run, an official snowmobile passes over the course collecting the stones and noting that each bottle has been hit. Again, lowest elapsed time wins, with one second added to the score for each bottle missed.

Event 5.

"BLINDFOLD SERPENTINE"

(Equipment needed: Course marker poles, arranged as in diagram; several large handkerchiefs or two pair of goggles with lenses taped over to serve as blindfolds; Starter and Timer.)



This is a back seat driver's game with the snow-pilot blindfolded, and the passenger behind him calling the directions as they pass over a winding, flat course. One machine at a time runs against the clock, with two seconds added to its time for each course marker knocked down. The trick is for pilot and passenger to agree on signals — and all the noise you'll hear won't be from engines! Be sure to run this event in the wide open spaces, where there are no parked machines or trees . . . for obvious reasons.

Event 6.

“ROPE AND CIRCLE”

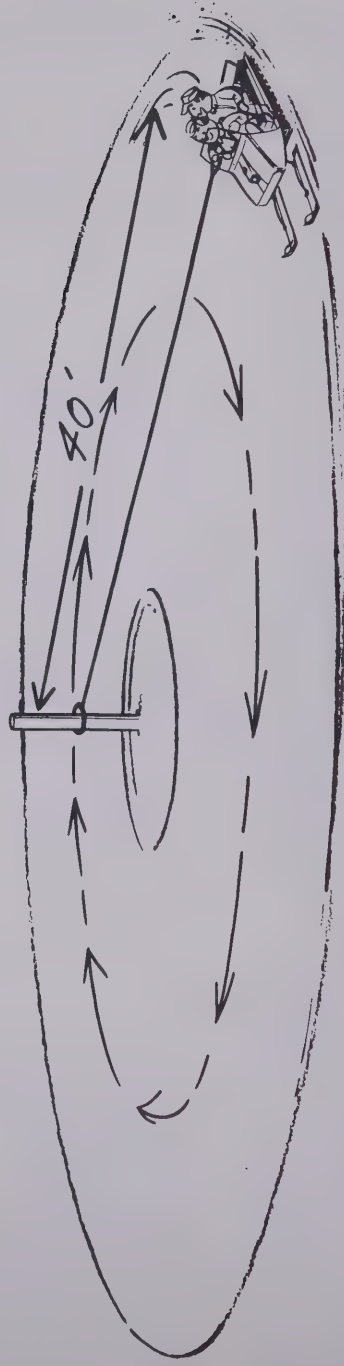
(Equipment needed:

*A hefty, three-foot stake
driven into ground or ice,
to which is tied a 40-foot
length of clothesline.)*

This is a test of the snowpilot's turning skill. With his passenger

holding the rope at a knot tied at exactly *forty feet*, the snowpilot drives his machine in a uniform circle around the stake. Any deviation outward will cause the passenger to lose the rope, and the team will be disqualified. Finalists will then re-run, but for final runs the passenger will hold the rope at a knot tied at a *thirty-foot*

mark. The characteristics of the snow surface will determine turning limits, and the figures given for rope lengths may be varied. If more than one finalist successfully completes the smaller circle, the rope is shortened again, and so on, until a single winner is found.



Event 7.

"LE MANS START"

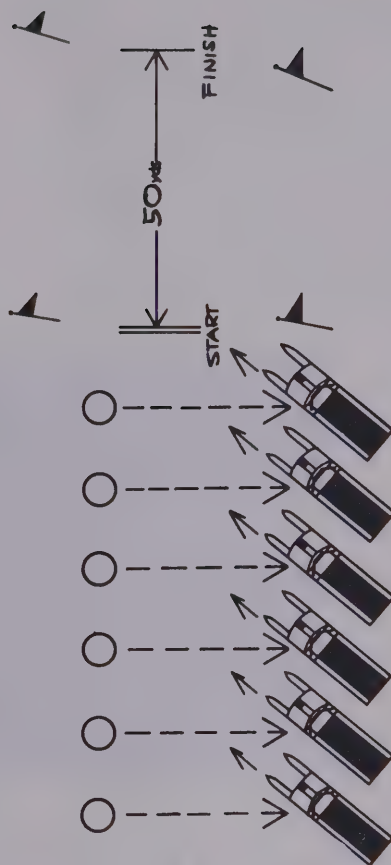
(Equipment needed:
Start and Finish line
markers; Starter
and Timer)

Named after the famous French sports car race which always begins in this fashion, here's a test of how well snowpilots know their

machines, and how well they're maintained for quick starting. Machines are lined up in a "diagonal parking" arrangement, behind the starting line. Snowpilots are lined up opposite their machines *at least* fifty paces away. At the starter's signal (drop of the flag), snowpilots run to their machines, start them, move across the starting line and race to the finish line some fifty yards

distant. As the contestant approaches the finish line, he must *brake* his machine to *stop as close to the line as possible without touching it!*

Lowest elapsed time wins, with ties decided by closeness to the finish line. Only one person, the snowpilot, is allowed on a machine for this multiple-entry event.



GO FOR SHOW

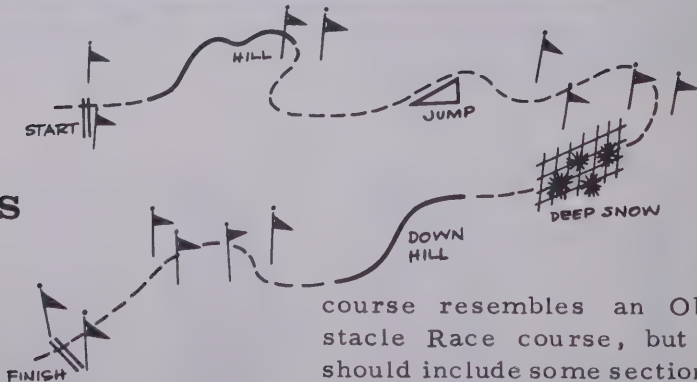
There's a little Showman in everyone, and everyone loves a Showman! Showmen on snowmobiles can be a welcome addition to winter carnival parades and other special events held during the snow season. A precision driving team made up of five or more matched snowmobiles, with their snowpilots dressed identically in bright-colored parkas and helmets, makes a feature attraction

wherever they're seen.

With practice, close-order drills and special formations can be developed for display on snow-covered parade routes - and your team will be welcome as Santa Claus to parade committees and sponsoring organizations wherever you appear. Fraternal or service organizations may wish to form their own snowmobile drill teams, too!



TRIALS



For Intermediate and Expert snowpilots only, Trials consist of one machine at a time attacking a hilly, "up-down-and-around" closed course, running against the clock. The Trials

course resembles an Obstacle Race course, but it should include some sections of very deep, nearly unmanageable snow, where skill in handling makes the difference in either finishing . . . or stalling out. Without deep snow, a very short, steep hill can serve as a "test" section instead.

ORGANIZED MEETS

Some snowpilots will eventually want events more challenging to their skill. Here are some suggestions which may be varied according to individual club rules and desires.

"Oval" Racing

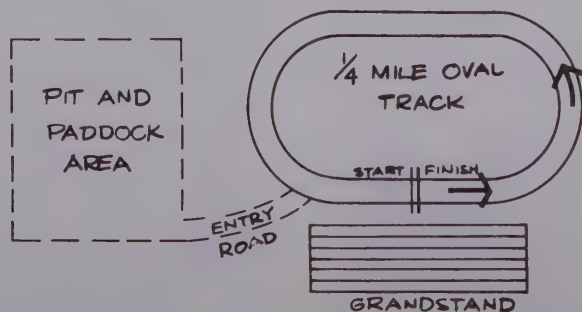
Using a snow-covered quarter-mile oval stock-car race track (where you'll also find grandstands, handy for spectators), or a similar track laid out on a frozen lake or a field, "oval" racing is carried out in much the same fashion as with automobiles. Organization is the key to success in holding a closed-circuit race and perhaps the most important factor here is keeping order in the pit-and-paddock area. The paddock area, where machines are gathered before and after races, should be roped off, and spaces assigned solely to competitors and their equipment.

Ideally, the paddock should be outside and away from the track itself to avoid congestion. Practice runs should be restricted to the track alone, with ample practice periods established and maintained. The area of the paddock facing the track

should be reserved for a "false grid", where contestants are lined up DURING the event just ahead. This ensures a smooth race program.

Ideal lap times come only after repeated practice runs by master snowpilots. When ideal times have been established, qualification runs by the body of contestants can begin, with the race committee setting limits on the size of the field, and lap times required to qualify.

If a FIELD is chosen as the site of an "oval" type race, it's wise to lay the track out at least 200 feet away from the nearest trees. "Hard hats" are advised, and goggles, of course. Racing should be counter-clockwise, with the course at least 30 feet wide at all points. Turns should be marked to frustrate "corner clippers".



NOTE: For full information on organizing a snowmobile rally, write for the Snow Cruiser Rally book, free from Snow Cruiser Information Centre, Peterborough, Ontario.

CROSS COUNTRY RACE

This is another test of high-speed driving skill plus a test of skill in tuning machines to produce maximum power. A poorly-tuned machine just can't be competitive, nor will it deliver the power required to handle the hills and holes encountered in a cross-country course. Reliability is vital.

Some snowmobile clubs lay out cross-country or point-to-point races over distances as long as 40 miles. Some have run over 200 miles! Cross-country races should include as many types of terrain as possible - omitting obviously dangerous territory, such as stump-studded forests, half-frozen marshes, or ice, with moving water underneath.

Machines are run in classes, and are started in groups of three to six, with five-minute intervals between "flights". Each snowpilot AND his machine must carry a number - indicating its starting order. For instance, number "1" might depart from the starting line at one minute after the hour. Here, and in other types of snowmobile racing where there are spectators, identification of snowpilots and their machines is important, so numbers should be large enough to see from at least 500 feet away. Letters at least 10 inches high should be worn on the nose cowlings of machines, and those car-

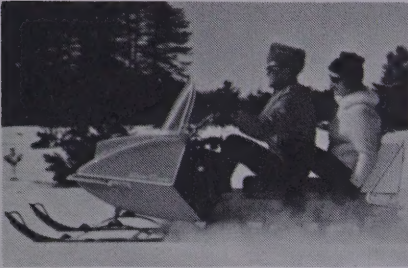
ried by snowpilots should match their machines'. A good idea to copy is the jumper number used by competitive skiers.

Depending on the length of the race, a series of checkpoints should be established along the route, both as a safety precaution and to ensure that competitors are sticking to the course. One way of keeping them on course is to require them to carry 3" X 5" "route cards", with a number of boxes printed on them, along with their official number. The boxes represent checkpoints, and as the competitor passes through a checkpoint, he is required to stop while the checkpoint captain initials the card in the appropriate box. Cards are collected at the end of the race, qualifying the competitor for scoring. Cards are then checked, and if the competitor has missed a checkpoint, he is either disqualified, or docked a certain number of seconds or minutes.

Customary Start and Finish lines are established, with adequate "pull-off" space provided at the Finish. When the last known competitor arrives at the finish, an official snowmobile carrying essential first aid and mechanical repair kits should "sweep the course" making certain that no one is left out in the bush.

DRESS FOR IT

Snowmobiling demands common-sense protection against wind and low temperatures. If you're uncomfortably cold, you won't be an efficient snowpilot.



Start at the bottom with good quality "thermal" underwear which will create a layer of "dead air" between your skin and the next layer of clothing. This, with wind resistant pants, a shirt and sweater worn under a wind-breaking parka, or one-piece insulated jump suit, will keep the body warm. Several brightly-colored, attractive one-piece snowmobiling suits are now on the market.

Footwear is equally important. Remember, you're not exercising as much as you'd be on snowshoes, so feet cool off fast! We recommend waterproof thermal boots worn with two pair of socks: One light pair under a heavier, woolen set. Rubber "Korean" type boots are very popular among snowpilots because of their foam-type insulation. They're available at shoe and sporting goods stores everywhere.

Goggles with interchangeable lenses are an important piece of equipment and can be obtained at any ski or sporting goods store. Three types of lenses are furnished with a good quality

pair: Gray or green for bright, glaring conditions; clear plastic for dull, cloudy days; amber or deep yellow for late-afternoon cruising - to overcome flat light which can hide depressions in the snow. Besides their light-protective function, goggles are vital in shielding eyes from lashing branches and twigs as well as eye-watering wind.

If you don't choose to wear a helmet, a hunting cap with earflaps is second best. For extreme cold, a Peruvian-type ski-mask is effective. Plastic face shields or visors are not recommended, as the moisture in your breath invariably condenses on the inside, clouding your vision badly.

Your hands are vulnerable on a snowmobile. They are out in the airstream, where severe cold can get to them quickly. A pair of thick leather mitts - without fingers - are good protection against not only the cold, but snapping twigs and branches as you cruise in the woods. With warm hands, you're in better control.



ACCESSORIES

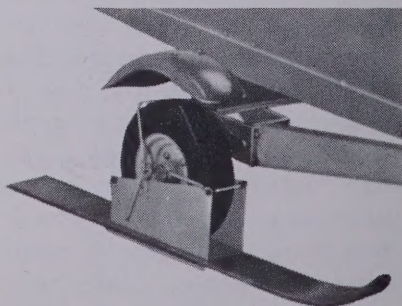


As snowmobiling grows in popularity, both manufacturers of the machines and outside sources come up with useful accessories which can add to the comfort, convenience or performance, of a snowmobile. Additional carrybags, covers, trailing sleighs and mechanical modification equipment just hint at the long list of things you can buy. Your Snow Cruiser dealer can recommend some sensible accessory purchases.

The most popular and useful accessory you can buy is a snowmobile trailer, which will allow you to tow your machine behind an automobile, just like you would tow a boat.

Some snowmobile trailers are custom-built to the purpose, while others are adaptations of larger boat trailers, having a tilt-and-swivel-bed layout for easy loading and unloading. If you already own a boat trailer with the tilt-bed feature, it can be readily con-

verted to snowmobile use by the following method: Remove rollers and cradle pads used for the boat. Bolt on a four-by-eight foot sheet of three-quarter-inch plywood for a platform. Use eye-bolts as anchors fore and aft, with new, half-inch manila line for tie-downs. When the boating season comes around again, the trailer is easily reconver-
ted for marine use.



One trailer manufacturer offers a pair of oversize skis with special brackets that convert any snow cruiser trailer into a sleigh.



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